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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,654	12/26/2001	Scott R. Swix	BELL-0163/01330	1792
38952	7590	05/25/2004	EXAMINER	
WOODCOCK WASHBURN LLP ONE LIBERTY PLACE - 46TH FLOOR PHILADELPHIA, PA 19103			BUI, KIEU OANH T	
			ART UNIT	PAPER NUMBER
			2611	

DATE MAILED: 05/25/2004

17

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/034,654

Applicant(s)

SWIX ET AL.

Examiner

KIEU-OANH T BUI

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 13-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***DETAILED ACTION***

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/21/04 has been entered.

***Remark***

2. Claims 1-12 and 25-41 were canceled in the pre-amendment dated 4/21/04 (paper no. 16). Pending claims are now claims 13-24 for examination.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

*A person shall be entitled to a patent unless --  
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.*

4. Claims 13-17, 19-20, and 22-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Hendricks et al. (U.S. Patent No. 6,160,989/ or "Hendricks" hereinafter).

Regarding claim 13, Hendricks discloses "a method for inserting advertising content in broadcast programming, comprising the steps of gathering at a viewer device data identifying characteristics of a viewer that is confined to the viewer device; receiving at the viewer device

advertising content; identifying at the viewer device advertising content corresponding to the characteristics of the viewer; receiving at the viewer device broadcast content; inserting at the viewer device into the broadcast content advertising content corresponding to the confined characteristics of the viewer”, i.e., based on customer profiles either gathered at the service center (Fig. 1, 12 & 17, and col. 29/line 40 to col. 30/line 27 for viewer profiles addressed) or at a set top terminal (at the viewing device) (see col. 29/line 60 to col. 30/line 27 as the viewer’s demographics data stored at the set top terminal), targeted advertisement insertion can be provided to each individual customer/user (Figs. 17-19, 21-22; Fig. 12 and col. 32/lines 4-11 as based on the viewer’s profile, the advertisement matching the characteristics of the viewer is inserting into the broadcast content for viewer to enjoy), see col. 34/line 16 to col. 35/line 64 for targeting advertisements to viewers based on their profiles at the service center; and section 5, col. 11/line 40 to col. 13/line 14 for a detailed description of a set top terminal together with its functions and capabilities).

As for claim 14, in further view of claim 13 above, Hendricks discloses “wherein said step of gathering data identifying characteristics of a viewer comprises gathering data regarding at least one of the following: age; address; marital status; income; interests; hobbies; purchasing habits; location; and television viewing habits” (col. 29/line 60 to col. 30/line 27 for a variety of viewer characteristics that the personal profile consists of demographic information).

As for claim 15, in further view of claim 13 above, Hendricks discloses “wherein the step of gathering data identifying characteristics of a viewer comprises the steps of identifying a plurality of categories into which broadcast programming may be grouped; and recording the frequency and duration with which the viewer is tuned to broadcast programming in each of said

plurality of categories”, i.e., different viewers with different categories can be grouped together for receiving different targeted advertisements and those frequency and duration are recording or stored in each personal viewer profile database (Fig. 12/item 314, col. 29/lines 34-51 & col. 30/lines 14-27; and Fig. 20a, col. 35/line 65 to col. 36/line 52 for group categories addressed).

As for claim 16, in further view of claim 13 above, Hendricks further discloses “wherein the step of identifying advertising content corresponding to the characteristics of the viewer comprises matching data identifying the target audience for advertising content to the characteristics of the viewer”, i.e., advertisement scheduling database 324 inserts appropriate most interest or corresponding advertisements to viewers/users based on the matching data of the advertisement content to the characteristics of the viewer according to set top ID number (col. 31/lines 9-42).

As for claim 17, in further view of claim 13 above, Hendricks discloses “wherein said step of receiving broadcast content comprises receiving broadcast content from one of a direct to home satellite distribution network and a cable television network”, i.e., a satellite distribution network and a cable television network are addressed to provide various sources of television programs to viewers (Figs 1-2, and col. 7/lines 10-34 & col. 8/lines 22-48).

As for claim 19, in further view of claim 13 above, Hendricks further discloses “comprising the step of storing advertising content for insertion into broadcast content at a later time’, i.e., the operation center controls the advertisement insertion at will at different later times (col. 9/lines 15-25) and advertisement contents are stored in a database (Fig. 12/item 322 for an advertisement library).

As for claims 20, in further view of claim 13 above, Hendricks further discloses “wherein said step of receiving advertising content is performed simultaneously with said step of inserting into the broadcast content advertising content corresponding to the confined characteristics of a viewer”, i.e., viewer receive advertising content at the same time as targeted advertisements are selected for displaying (Fig. 17, and col. 36/lines 12-30).

As for claim 22, in further view of claim 13 above, Hendricks discloses “a computer readable medium having stored thereon computer executable instructions for performing the method”, i.e., computer software routines with corresponding algorithm are used to perform the task of targeting advertisements (col. 31/line 44 to col. 33/line 14 for software routines and PCI routine).

As for claim 23, in further view of claim 13 above, Hendricks discloses “comprising displaying broadcast content with advertising content matching the confined characteristics of the viewer inserted therein” (Fig. 17, and col. 34/line 15 to col. 36/line 52 for more details on this matter).

As for claim 24, in further view of claim 13 above, Hendricks discloses further “comprising gathering data identifying whether advertising content matching the confined characteristics of the viewer has been displayed” (Fig. 17/item 470, and col. 36/lines 12-30 7 col. 29/line 40 to col. 30/line 27 for user profiles are used for targeting advertisements).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.*

6. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al. (U.S. Patent No. 6,160,989) in view of Hylton et al. (US Patent No. 5,630,204/ or “Hylton”).

As for claims 18, in further view of claims 13 above, Hendricks does not disclose “further comprising receiving advertising content from a digital subscriber line (DSL) broadband network” and “transmitting to the viewer the advertisement content corresponding to the characteristics of the viewer over a digital subscriber line broadband network”; however, Hendricks suggests that other communication media for digital transmission such as fiber optics and MPEG standards is used (col. 7/lines 29-64), and furthermore, Hylton teaches to include a digital subscriber line (DSL) broadband network for providing broadband services to viewers based on their profiles (Hylton, col. 2/lines 19-56, col. 6/lines 20-41, col. 8/lines 11-29, and col. 15/lines 34-46). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hendricks’s system with the inclusion of a digital subscriber line (DSL) broadband network as means for digital communications between the system and the subscriber for broadband interactive services such as video on demand, home shopping and so on as suggested by Hylton.

7. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al. (U.S. Patent No. 6,160,989) in view of Flickinger et al. (U.S. Patent Application No. US2002/0083441 A1/ or "Flickinger").

As for claim 21, in further view of claim 13 above, Hendricks discloses a local insertion component 246, under the control and instructions of network controller 214, can detect the locations where and when to insert the advertising content corresponding to the characteristics of the viewer (col. 21/line 35 to col. 22/line 37; and col. 29/line 60 to col 30/line 27 for viewer profile and advertisement content corresponding to viewer's profile are inserted and provided to the viewer, more at col. 32/lines 4-11), but Hendricks does not disclose the step of comprising "detecting cue tones in the broadcast content identifying locations where advertising content may be inserted"; however, such a technique of using a cue tone detecting module for detecting a cue tone for identifying the locations where advertising content may be inserted is known in the art. In fact, Flickinger teaches an exact same technique to include a cue tone detecting module for detecting a cue tone for identifying the available locations where advertising content may be inserted (see Flickering, Fig. 9, and pages 7-8, sections 0093-0095). Therefore, it would have been obvious to one of ordinary skill in the art to modify Hendricks' system with Flickering's teaching technique of including a cue tone detecting module before ad insertion for identifying the available locations where advertising content may be inserted in the proper timing.



*Response to Pre-amendment Arguments*

8. Applicant's arguments filed on 04/21/04 have been fully considered but they are not persuasive. (It seems that the Applicants do not response to this argument, but to the Office Action dated 10/21/03 instead).

Applicants basically argue that Hendricks does not teach or suggest a technique of “identifying at the viewing device advertising content corresponding to the characteristics of the viewer, and inserting at the viewing device into the broadcast content the advertising content matching the characteristics of the viewer that is confined to the viewer device” as cited in claims 13. After carefully studied the arguments versus Hendricks’ reference, the Examiner respectfully traverses the Applicants’ arguments and would like to invite the Applicants to take a closer look at Hendricks once more time. Although Applicants were correct by pointing out that the local inserter of Hendricks (Fig. 6A, 246) is within a headend, not at a local viewing device; however, Hendricks does teach that the insertion of the advertising content corresponding to the characteristics of the viewer can also be performed at the set top terminal. Here are the reasons on how Hendricks does it.

First, Hendricks teaches that the set top terminal includes a memory (-ies) which stores other information besides individual compressed programs, control signals and menus such as texts, news or other relevant information (col. 12/lines 1-65). Then the other relevant information including the user profile and packages of advertisements that is most interest to the user is stored in the set top terminal (col. 30/lines 14-27 & col. 32/lines 4-11). Please note that the user profile is done at numerous techniques, not just the only polling technique by the headend system (as suggested by the Applicants in the arguments). Based on this user profile,

the advertisement targeting routine is performed for each user with packages of advertisements that is most interest to the user forwarded to the user –meaning, the set top terminal (col. 32/lines 4-11), but the most importantly, the routine for an algorithm to select an appropriate an advertising content corresponding to the characteristics of the user is NOT only performed by the network controller 214 BUT also by the set top terminal 220 itself (emphasis added), wherein the display of adverting contents are depending on set top groupings, program category, and set top ID and by matching the targeted advertisement (see col. 36/lines 12-52). Understanding this procedure, one of ordinary skill in the art can easily realize Hendricks discloses the steps of “identifying at the viewing device advertising content corresponding to the characteristics of the viewer and the insertion of advertising content matching the characteristics of the viewer” are also performed at the viewing device, or the set top terminal, in addition to the local inserter at the headend.

Therefore, the Examiner disagrees with the Applicants’ arguments and stands with the disclosure and teaching of Hendricks, Hylton, and Flickinger as disclosed in the previous Final Office action and as discussed in a close-up look of Hendricks in this argument.

### *Conclusion*

9. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

(703) 872-9306, (for Technology Center 2600 only)

*Hand-delivered responses should be brought to Crystal Park IV, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).*

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krista Kieu-Oanh Bui whose telephone number is (703) 305-0095. The examiner can normally be reached on Monday-Friday from 9:00 AM to 6:00 PM, with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile, can be reached on (703) 305-4380.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.



**KRISTA BUI  
PATENT EXAMINER**

Krista Bui  
Art Unit 2611  
May 20, 2004